

ABSTRACT

This invention is related to a thin film transistor (TFT) array and method of making same, for use in an active matrix liquid crystal display (AMLCD) having a high pixel aperture ratio. The TFT array and corresponding display are made by forming the TFTs and corresponding address lines on a substrate, coating the address lines and TFTs with a photo-imageable insulating layer which acts as a negative resist, exposing portions of the insulating layer with UV light which are to remain on the substrate, removing non-exposed areas of the insulating layer so as to form contact vias, and depositing pixel electrodes on the substrate over the insulating layer so that the pixel electrodes contact respective TFT source electrodes through the contact vias. The resulting display has an increased pixel aperture ratio because the pixel electrodes are formed over the insulating layer so as to overlap portions of the array address lines.

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